

Do drug company promotions influence physician behavior?

There is growing evidence that they can distort prescribing choices [see p 236](#)

Bob Goodman
Division of General
Medicine
Columbia University
College of Physicians
and Surgeons
622 W 168th St
Room VC2-205
New York, NY 10032

bob@nofreelunch.org

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In 1993, the Joint National Committee on the Detection, Evaluation, and Treatment of High Blood Pressure published its 5th report, which concluded “Because diuretics and β -blockers have been shown to reduce cardiovascular morbidity and mortality in controlled clinical trials, these two classes of drugs are preferred for initial drug therapy.”¹ Nevertheless, between 1992 and 1995, the number of prescriptions written for thiazide diuretics decreased by 50% and for β -blockers by almost 40%, whereas prescriptions for calcium channel blockers increased by 13%.² The committee made similar recommendations in its 6th report, published in 1997.³ But calcium channel blockers continue to be the best-selling antihypertensive agents—1 in particular (amlodipine [Norvasc]) is among the top 5 selling drugs of any kind worldwide. There is no evidence that they are superior to the thiazides in controlling hypertension, and in fact, a recent meta-analysis suggests they are inferior.⁴ They are considerably more expensive. In short, they are less effective, more expensive, and the most heavily prescribed. How do we explain this?

We can find a clue in a recent study by Chew et al,⁵ who surveyed 154 general medicine and family physicians at an academic medical center. Nearly all physicians surveyed said that they would ideally choose a diuretic or β -blocker as initial therapy for hypertension. However, of the physicians who said they would use a sample for an

uninsured patient with hypertension, more than 90% chose a sample that differed from their preferred choice. The existence of samples influenced them to use medication they would not have otherwise prescribed.

Drug companies provided more than \$7 billion worth of pharmaceutical samples in 1999, most of these the newest, most expensive products. In the same year, the industry spent almost \$14 billion promoting its products in the United States. Calcium channel blockers are heavily promoted to physicians as antihypertensive agents, and perhaps this promotion explains why they are so heavily prescribed. Many physicians will deny this, saying that pharmaceutical promotion, be it pen or *penne*, has no effect on their prescribing behavior. But the medical literature abounds with studies suggesting that promotion does affect behavior.

For example, Avorn and colleagues surveyed internists in the Boston area on their use of 2 classes of drugs, the propoxyphene analgesics and peripheral and central “vasodilators.”⁶ Although these agents were heavily promoted as effective, the medical literature was clear that they were neither effective nor offered any advantage over currently available therapy. Nevertheless, most physicians believed these agents to be effective—even those who claimed to rely more on scientific, as opposed to commercial, sources.

Chren and Landefeld compared physicians who had requested additions to the hospital formulary (cases, $n=40$) with those who had made no such requests (controls, $n=80$).⁷ Physicians who had made requests were much more likely than the controls to have met with pharmaceutical representatives (odds ratio, 5.1; 95% confidence interval, 2.0-13.2). In addition, physicians who had interactions with specific companies were more likely to request drugs made by these, rather than unfamiliar, companies.

Orlowski and Wateska looked at the use of 2 drugs at their hospital before and after 2 all-expenses-paid symposia, 1 at a “luxurious resort” on the West Coast, the other in the Caribbean.⁸ Usage of both drugs increased following the symposia, in contrast to national usage patterns at the time. This occurred despite the stated belief of the participating physicians that these enticements would not alter their prescribing patterns.

The literature is consistent: all those pens and self-sticking note pads, coffee mugs and calipers, “dash and dines,” sporting events, and ski vacations do affect physician behavior.

The CAGE Questionnaire for Drug Company Dependence

- Have you ever prescribed **C**elebrex[™]?
- Do you get **A**nnoyed by people who complain about drug lunches and free gifts?
- Is there a medication **l**o**G**o on the pen you're using right now?
- Do you drink your morning **E**ye-opener out of a Lipitor[™] coffee mug?

If you answered yes to 2 or more of the above, you *may* be drug company dependent.

The CAGE questionnaire: are you drug company dependent?

The medical culture views pharmaceutical industry largesse as not merely acceptable but an entitlement. Can we change this culture? The industry does have a right to promote its products and to make profits—even astronomical ones—and indeed, the industry's obligations are to its shareholders, not to patients. As physicians, however, our primary responsibility is to our patients. Industry gifts and hospitality affect our prescribing behavior. They are literally paid for by our patients, and they compromise our position as professionals.

No Free Lunch (www.nofreelunch.org) was started in 1999 with the goal of changing this culture. We want health care professionals to practice medicine on the basis of unbiased evidence, rather than biased pharmaceutical promotion, and to “just say no” to the industry hospitality that damages patient care and the profession. With members and supporters from around the globe, we serve as a source of information and assistance to those who are trying to rid themselves, their practices, or their institutions of pharmaceutical influence. We are currently creating a “Drug-free practitioner listing” of health care professionals who have pledged to remain free of drug company money, hospitality, and influence (see www.nofreelunch.org/pledge.html).

Writing recently in the *Journal of the American Medical Association*, Jerome Kassirer suggested that the problem was not the result of greed or self-interest but rather a consequence of “inattention to the issue” on the part of our profession.⁹ No Free Lunch's objective is to get physicians to pay attention.

References

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No Free Lunch believes pharmaceutical promotion should not guide clinical practice

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